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Rejection Sensitivity as Mediator Between Stigma and Romantic Relationship Satisfaction

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REJECTION SENSITIVITY AS MEDIATOR BETWEEN STIGMA AND ROMANTIC RELATIONSHIP SATISFACTION

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Abstract

HIV/AIDS is a highly stigmatizing condition that dramatically influences the social relations of those infected with the disease (Herek & Glunt, 1988; Kalichman, 2000). Stigmatized individuals experience interpersonal rejection because of their stigma and this rejection can heighten dispositional sensitivity to rejection (Downey & Feldman, 1996). Increased sensitivity to interpersonal rejection has been shown to decrease relationship satisfaction and lead to relationship dissolution (Downey, Freitas, Michaelis, & Khouri, 1998). Few studies have examined the influence of stigmatization on romantic relationships and little is known about the romantic relationships of people living with HIV/AIDS. The current study examined the role of rejection sensitivity as a mediator in the association between HIV/AIDS stigma and romantic relationship satisfaction. A diverse sample of HIV-positive participants was recruited from Vermont and neighboring states. Participants completed measures of perceived stigma, rejection sensitivity and satisfaction with their current romantic relationship. Disclosure concerns and enacted, or personalized, stigma predicted decreased relationship satisfaction. Rejection sensitivity did not mediate the relationship between stigma and relationship satisfaction. Results suggest that both rejection sensitivity and perceived stigma independently influence relationship satisfaction. The implications of the influence of stigma on romantic relationships are discussed.

Dedication

To my parents for their continued love and support.

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Table of Contents

List of Tables

List of Figures

HIV/AIDS is a highly stigmatizing condition that dramatically influences the lives of those infected (Herek & Glunt, 1988). Due to the nature of the disease, it is likely that the social relations of seropositive individuals are severely disrupted, which can hinder their psychosocial and physical well-being (Kalichman, 2000). Romantic relationships are a specific type of interpersonal relationship that are likely to be influenced by stigmatization and are also likely to have a substantial impact on well-being. Unfortunately, romantic dyads are often ignored in stigma research.

Stigmatized individuals perceive and experience interpersonal rejection because of their stigma. This rejection can heighten a stigmatized individual's sensitivity to future rejection (Downey & Feldman, 1996). Individuals with high levels of rejection sensitivity often seek acceptance and intimate contact within romantic relationships (Downey, Bonica, & Rincon, 1999). Despite their desire for a romantic partnership, rejection sensitive individuals are prone to interpret ambiguous interpersonal cues as rejection and to react in relationship-damaging ways (Downey & Feldman, 1996). Given the interpersonal patterns often seen in rejection sensitive individuals, it is not surprising that rejection sensitivity has been linked with low levels of romantic relationship satisfaction (Downey, Freitas, Michaelis, & Khouri, 1998).

The aim of the current investigation is determine whether individuals with HIV/AIDS who perceive high levels of stigma report decreased romantic relationship satisfaction compared to those who perceive less stigmatization. I hypothesized that this negative relationship will be partially mediated by rejection sensitivity. My mediation model predicts that higher levels of stigma will be related to an increased sensitivity to

rejection, and this increase in rejection sensitivity will be associated with decreased relationship satisfaction.

I will begin my review of the relevant literature by explaining how rejection sensitivity may play a role in the romantic relationships of those living with HIV/AIDS. I will discuss the conceptualization of rejection sensitivity, how it functions as a defensive-motivational system, the theoretical underpinnings of this construct, and its self-fulfilling nature. I will further describe how corrective experiences may change an individual's sensitivity to rejection and I will talk about the malleability of rejection sensitivity across the lifespan.

Next, I will focus on status-based rejection sensitivity, which is experienced by members of various stigmatized groups. I will then discuss how stigma is usually conceptualized and what is generally known about the effects of stigmatization. Next, I will describe the origins of HIV-stigma and the effects of HIV-related stigma on individuals living with the disease.

I will discuss the research on the relationships of stigmatized people, including *courtesy stigma*, which is stigma that is experienced by those associated with members of a stigmatized group (e.g., the caregivers of people with HIV/AIDS). My review of stigma and relationships will include a section on past research on marginalized relationships in general and research on the romantic relationships of people living with HIV/AIDS in particular. I will conclude my review of the extant literature by describing how stigma relates to rejection and rejection sensitivity. This review will show that

HIV/AIDS stigma is a rejecting experience that can influence sensitivity to rejection, which then hinders functioning in romantic pairings.

Rejection Sensitivity

Conceptualization of Rejection Sensitivity

Gaining acceptance and avoiding interpersonal rejection is a fundamental motivation that is common to all human beings (Rogers, 1961; Maslow, 1987; Horney, 1937). Because we share this powerful and pervasive motivation to belong, experiences of rejection by others decrease physical and mental well-being and hinder social functioning (Baumeister & Leary, 1995). Our central motivation to achieve belongingness disposes us to resist relationship dissolution and strive to maintain amicable bonds with important others. This potent desire to belong influences both affective patterns and cognitive processes, which shape our moment-to-moment experiences in the world.

Although the striving to avoid rejection is universal, individual differences exist in perceptions and reactions to incidences of potential rejection (Downey & Feldman, 1996). Reactions to perceived rejection vary in their intensity, but often entail emotional withdrawal, negative affect, jealously, hostility and dejection. Because perceiving rejection also influences the way we think about others and ourselves, rejection experiences can lead to drastic changes in how we organize information about our social world (Baumeister & Leary, 1995).

The specific beliefs individuals hold about their romantic partners (i.e., whether they will be accepting and supportive or rejecting in times of need) are known to have a

substantial influence on the quality and course of their relationships (Baldwin, 1992; Hazan & Shaver, 1994). Relationship beliefs about acceptance and rejection, in particular, are assumed to have an enormous impact on the initiation, maintenance, and dissolution of romantic relationships (e.g., Erikson, 1950; Horney, 1937). The concept of rejection sensitivity can help explain how an individual's set of beliefs about rejection, which result from prior experiences, can influence functioning within romantic pairings (Downey & Feldman, 1996).

Rejection sensitivity, as defined by Downey and Feldman (1996), is a dispositional attribute such that individuals high in rejection sensitivity have an increased tendency to angrily or anxiously expect, readily perceive, and intensely react to interpersonal rejection. The theory underlying rejection sensitivity holds that individuals differ in how easily they perceive rejection. For example, some individuals may interpret imagined, benign, or ambiguous social cues as rejection, whereas others may be more accurate in their judgments of rejection cues. Individuals also vary in their reactions to perceived rejection, with some people responding calmly and others overreacting in a manner so extreme that it may undermine their psychological health and relationships (Downey & Feldman, 1996).

Sensitivity to rejection is thought to arise from previous rejection experiences that may occur at any point in the lifespan. In other words, sensitivity to rejection may arise in childhood as defensive protection against parental rejection (Feldman & Downey, 1994) or it may come about much later as a result of rejection by important others, such as peers or romantic partners (Downey & Feldman, 1996; Downey et al., 1998).

Regardless of when rejection sensitivity initially develops, it can lead to inappropriate cognitions and behaviors that put an individual at risk for additional rejection in various interpersonal domains.

Experimental evidence shows that middle school children who are highly sensitive to rejection show heightened distress (self-reported) after they experience ambiguous rejection by one of their peers (the friend they selected to interview with declined to join them, with no explanation given) (Downey et al., 1998). A subsample of these middle school children were tracked for one year, and as the authors predicted, rejection sensitive children behaved more aggressively, experienced increased interpersonal problems, and decreases in their academic functioning over time (Downey et al., 1998). Individuals with high levels of rejection sensitivity often perceive rejection cues in ambiguous or benign social situations. These erroneous perceptions lead such individuals to act in ways that undermine their relationships (Downey & Feldman, 1996)

Theoretical Basis of Rejection Sensitivity

Defensive motivational system. Rejection sensitivity has been shown to function as a defensive motivational system (Downey, Mugious, Ayduk, London, & Shoda, 2004). Lang, Bradley, and Cuthbert (1990) proposed that human emotions are organized into two affective-motivational systems, the appetitive system and the defensive/aversive system. A defensive system reacts to aversive stimuli, such as threatening situations or punishment, by motivating the individual to respond with avoidance and/or a fight-or-flight reaction. The appetitive system responds to positive stimuli, such as rewards, by motivating the individual to approach the stimuli and engage

in consummatory behavior (Lang, Davis, & Ohman, 2000; Metcalfe & Mischel, 1999). Rejection sensitivity, like other defensive motivational systems, is an aversive reaction to the environment.

According to Lang and colleagues (1990), valence of a stimulus determines which particular system is activated, and the intensity with which a given motivational system is activated is determined by the level of arousal. A highly threatening negative-valence stimulus can activate the defensive-motivational system, which triggers automatic behaviors designed to protect the individual. What constitutes a rewarding or threatening stimulus can be biologically based or learned (Downey et al., 2004). Because vigilance for threatening stimuli is dependent on previous learning, individuals who have experienced large amounts of rejection will be more apt to detect any hint of interpersonal rejection. Additionally, activation of either motivational system can be context-dependent, for example, an individual high in rejection sensitivity may experience increased vigilance in a situation where rejection has occurred in the past (Hamm, Cuthbert, Globisch, & Vaitl, 1997**).**

Because it is an affect-based defensive motivational system, rejection sensitivity leads individuals to have more powerful, defensive reactions to perceived rejection than less sensitive individuals (Downey at al., 2004). To test the hypothesis that rejection sensitivity is a defensive motivational system, Downey and colleagues (2004) used a startle-probe paradigm in which they showed participants a variety of paintings and measured the magnitude of their eyeblink response to a loud noise. Participants who were highly sensitive to rejection displayed a potentiated (i.e., larger magnitude)

eyeblink, signifying an increased startle response to the loud noise when they viewed rejection-themed paintings, while participants low in rejection sensitivity did not have an augmented startle response to the loud noise. Regardless of rejection sensitivity levels, participants did not have an increased startled response when they viewed negative valence paintings that did not entail rejection (e.g., works by Rothko).

Furthermore, participants who were highly sensitive to rejection did not display an attenuated eyeblink when they viewed paintings depicting acceptance, ruling out the competing hypothesis that highly sensitive individuals are just more attuned to social information. In other words, highly rejection sensitive participants did not display an increased activation of the appetitive-motivational system when acceptance themed paintings were displayed. Less sensitive individuals also did not display an increased activation of the appetitive system when observing acceptance themed paintings. Therefore, it appears that individuals with high levels of rejection sensitivity have an increased reaction to rejection cues, but they do not have an increased response for other negative cues or for acceptance. This intense reaction to rejection does not appear to be attenuated by acceptance and is not generalizable to other non-interpersonal negative experiences (Downey et al., 2004).

In sum, individuals who are highly sensitive to rejection have an over-activation of their defensive motivational system, which results in an increased vigilance for and response to rejection stimuli (Downey et al., 2004). I believe that previous experiences with rejection, such as HIV/AIDS stigmatization, can lead to an over-activation of the defensive motivational system, which results in more awareness of and inappropriate

responses to rejection. The theoretical underpinnings of rejection sensitivity can help explain how this dysfunctional activation of the defensive motivational system arises and is sustained.

Attributional theories of relationships. The concept of rejection sensitivity also is theoretically rooted in attributional (e.g. Dodge, 1980) theories of relationships, which examine the ways in which people attribute the behavior of others or themselves to either the situation (situational attribution) or to the person doing the behavioral (dispositional attribution). Attribution theorists explore how these attributions influence the way they think and behave (Heider, 1958).

The health and survival of romantic relationships often are affected by the attributions couples make. Married partners who attribute their spouse's behavior to negative intent, such as lack of consideration for their needs, dislike, or lack of love, are more dissatisfied with their romantic relationships than spouses who make less negative attributions for their partner's behavior (Bradbury & Fincham, 1990). Rejection sensitivity theorists also note that negative interactions that are typical of unsatisfactory relationships can be predicted by negative attributions (Fincham, 1994). Highly rejection sensitive individuals often attribute malicious intent to ambiguous social behavior, and this is believed to underlie much of the cognitive distortions and interpersonal difficulties (Downey & Feldman, 1996).

Attachment theory. Classical attachment theory, another important foundation in the theory of rejection sensitivity, provides a framework for understanding how rejection experiences can undermine close relationships (Bowlby, 1979). John Bowlby

(1973), a British ethologist and father of attachment theory, designed attachment theory to describe the nature of a child's affectional bond to his or her primary caregiver and explain how this connection influences psychological adjustment and functioning throughout the lifespan. Attachment theory focuses on the role of early experiences with caregivers and how these encounters shape the way a child thinks about and bonds with others later in life (Fraley, 2002).

Bowlby (1973) theorized that individual variation in attachment results from differences in individuals' internal working models of the self and close others. Internal working models are systems of thoughts, memories, beliefs, expectations, emotions, and behaviors about the self and others that are developed and updated through social interactions. When these models are initially developing in childhood, the models of the self and others are thought to be inextricably linked together such that children will come to believe that they are lovable and valuable if they are loved and valued by their caregivers. Internal working models are thought to become deeply ingrained, which leads them to exert an automatic influence on individual's thinking and functioning that operates outside of conscious awareness (Cassidy, 2000). These embedded expectations, or internal working models, are thought to influence the way children organize social information, which can have considerable consequences for their interpersonal dynamics throughout life (Fraley, 2002).

Mary Ainsworth (1978) created a procedure entitled "strange situation" to observe attachment relationships between mothers and their children. In the strange situation procedure, a young child is observed playing for approximately twenty minutes while the

primary caregiver and a stranger enters and leaves the room. The child's responses to the varying levels of stress and unfamiliarity in the situation are observed. Observers focus on how the child reacts to the departure and return of their primary caregiver and how much the child explores his or her strange environment (in terms of playing with toys or straying from their caregiver). Children are categorized into one of three mutually exclusive attachment patterns or styles based on these observations. From her own observations, Ainsworth (1978) concluded that there were three major styles of attachment: secure attachment, ambivalent-insecure attachment, and avoidant-insecure attachment. The majority of children are securely attached, meaning they will explore their world, but return to their parents if they are frightened and greet them once they return to the room. Children with an ambivalent pattern of attachment are frightened by strangers, even in the presence of their primary caregiver, and will show ambivalence when their caregiver returns to the room. As implied by the name, avoidant attached children will avoid their primary caregivers, and show no preference between a stranger and their caregiver (Ainsworth et al., 1978).

Hazan and Shaver (1987) were the first to begin to understand adult romantic relationships in terms of attachment processes. The three major attachment styles in infancy (secure, avoidant, and ambivalent) were translated into equivalent adult attachment styles that could be applied to romantic attachments. A self-report measure designed to classify adults into one of three romantic attachment styles was tested widely with encouraging results. Hazan and Shaver (1987) found that in their initial sample 56% of their respondents could be classified as securely attached, with 25% having an

avoidant style, and the remaining 19% falling into the anxious/ambivalent category, and these results were directly proportional to the ratio of infant-mother attachment classifications found in studies of American babies (e.g., Campos et al., 1983 found the following: 62% secure, 23% avoidant, and 15% anxious/ambivalent). Later studies continued to find similar proportions in attachment styles (e.g., Downey & Feldman, 1996; Hazan & Shaver, 1994), suggesting that similar underlying mechanisms may link infant attachment style with romantic attachment style later in life.

The consistency and continuity in attachment styles between infancy and adulthood has been attributed to the stability of the internal working models of the self and others (Bowlby, 1969; Hazan & Shaver, 1987). Insecure romantic attachment styles have been implicated as possible sources of negative interpersonal expectations (e.g., the belief that one is not worthy of love or capable of finding an acceptable partner) in individuals with sensitivities to rejection (Downey & Feldman, 1996). Self-fulfilling prophecies are one way that anxious expectations can lead to rejection within the context of romantic relationships.

Effects of Rejection Sensitivity in Relationships

Negative self-models. Murray and colleagues (2001) argue that individuals who have negative self-models (i.e., feelings that they are unworthy of love) are often in less satisfying relationships. These negative self-models may arise from stigmatization, or other damaging personal experiences, and can prevent individuals from believing that good partners love them. In an examination of heterosexual dating and married couples, Murray and colleagues found such evidence for the negative models of self hypothesis.

Individuals who were troubled by self-doubt underestimated the strength of their partner's love, which predicted a decrease in positive perceptions for the partner. Also, feeling less loved by a less valuable partner predicted decreased levels of optimism for the future and relationship dissatisfaction. Although this particular study did not focus on stigmatized relationships, it is easy to see how doubt and negative models of the self can arise from having a stigmatized identity (e.g., being diagnosed with HIV/AIDS) and lead to decrements in relationship satisfaction.

Self-fulfilling prophecies in romantic relationships. Sociologist Robert Merton was the first to clearly define a self-fulfilling prophecy, he delineated the concept as follows, "The self-fulfilling prophecy is, in the beginning, a *false* definition of the situation evoking a new behaviour which makes the original false conception come 'true'. This specious validity of the self-fulfilling prophecy perpetuates a reign of error. For the prophet will cite the actual course of events as proof that he was right from the very beginning" (1968, p. 477). In other words, an individual unknowingly acts in accordance with his or her beliefs (e.g., a person may act rude if he or she feels they are going to be rejected), and this behavior causes their beliefs to come true in reality (e.g., the person who anticipated rejection is now rejected because of his or her rude behavior) (Metron, 1968; Rosenthal & Jacobson, 1968). Sroufe (1990), using attachment theory for his conceptual groundwork, stated that the expectations people have about rejection could cause people to behave in dysfunctional ways that elicit interpersonal rejection from others.

High levels of rejection sensitivity have been shown to lead to a self-fulfilling prophecy, where interpersonal rejection is elicited from others through negative behaviors that arise from anticipating rejection (e.g., Downey & Feldman, 1996; Downey et al., 1998). Individuals with high levels of rejection sensitivity may be reluctant to enter into a romantic relationship out of fear of rejection, in other words, they may avoid these intimate pairings as a result of previous rejection experiences. Because individuals with high levels of rejection sensitivity are likely to desire the acceptance and support that comes with a romantic partnership, they may seek out intimate relationships despite their pronounced fear of rejection. These hypervigilant or anxious individuals have been shown to have intense reactions to minimally rejecting or ambiguous situations that they perceive as intentional rejection (Downey et al., 1998). Intense reactions to rejection can range from a number of aversive affective states and dysfunctional behaviors including: withdrawal, inappropriate efforts to feel accepted, hostility, and desperation (Downey & Feldman, 1996). Because these intense affective and behavioral responses to perceived or actual rejection are likely to undermine the quality of romantic relationships, highly rejection sensitive individuals can create a self-fulfilling prophecy of rejection.

This self-fulfilling nature of high levels of rejection sensitivity was demonstrated in a sample of college students who were in romantic relationships (Downey et al., 1998). Individuals who were highly sensitive to rejection displayed inappropriate, hostile reactions when discussing a self-selected conflict issue with their partner. These inappropriate reactions, such as a harsh tone of voice or using verbal threats during the discussion, led to decreased levels of relationship satisfaction and lower levels of interest

in the relationship, as reported by the partner following the discussion. Individuals who are high in rejection sensitivity are more likely to experience relationship dissolution (i.e., breakup) than individuals with lower levels of rejection sensitivity (Downey et al., 1998). Once the rejection happens, individuals high in rejection sensitivity will have their beliefs about rejection reaffirmed, leading to a vicious cycle of rejection.

Relationship problems. Rejection sensitivity can also explain harmful relationship problems (Purdie & Downey, 2000). Rejection sensitivity levels in these adolescent females (in sixth through eight grade) predicted insecurity about a partner's commitment to the relationship and an increased willingness to engage in dysfunctional behaviors to maintain the relationship one year later. These dysfunctional behaviors included not allowing a romantic partner to see his or her friends as well as doing things one acknowledges as "wrong" to remain in the partnership. Additionally, those who were high in rejection sensitivity were more likely to experience physical aggression and nonphysical hostility during conflicts with their romantic partner.

Stability and Change in Rejection Sensitivity

Corrective experiences. Although sensitivity to rejection and relationship problems can be self-perpetuating in nature, there is potential for change if mental representations are corrected. Individuals' cognitive structures, or working models, regarding romantic relationships can be modified through experience, however this malleability decreases over time (Downey et al., 1999). Similarly, Bowlby (1980) suggested two routes through which change in attachment style could occur, an individual could think and reflect upon his or her beliefs to induce change or an

individual could experience a corrective relationship. This malleability is also thought to vary on whether the rejection experiences that lead to an increased sensitivity happened early in childhood or were restricted to later adult life, with prolonged and early experiences being more ingrained and resistant to contradictory experiences (Downey et al., 1999).

The initial work in romantic attachment hinted at a deterministic point of view, such that romantic functioning is largely determined by early (i.e., infant-caregiver attachment) experiences through, fairly stable, internal working models (i.e., belief systems). Hazan and Shaver (1987) discuss the possibility of a belief-based vicious cycle that prevents insecurely attached infants from forming secure attachments later on in life. However, the correlation between infant and adult attachment styles is not perfect. To explain the moderate, but not strong correlations between self-reported infant-mother experiences and adult attachment, the authors emphasize that the continuity in attachment is expected to decrease slightly throughout the lifespan, as internal working models are revised accordingly with each new relationship. This statement is qualified by reminding readers that mental representations are amenable to change, when presented with new information, but such change is difficult with the repeated or habitual use of uncorrected representations (Hazan & Shaver, 1987). In other words, the longer a person utilizes a maladaptive way of thinking, the harder it is to correct in future relationships.

Because individuals have had relatively vast experience with relationships (e.g., friendships and romantic relationships) by the time they reach adulthood, expectations about rejection are more likely to be fairly stable and resistant to change later in life

(Downey & Feldman, 1996). Although it is not common, rejection expectations can be corrected through positive experiences with romantic partners. In order to reduce already existing rejection sensitivity, significant others need to alter a rejection sensitive individual's fears and expectations of rejection so that they are closer to reality (i.e., realizing that rejection is not imminent). In addition to changing faulty belief systems, highly rejection sensitive individuals must also learn adaptive emotional regulation and conflict resolution skills (Downey et al., 1999). One optimistic finding is that peer acceptance has been shown to lead to a decrease in rejection sensitivity in middle school-aged adolescents (London, Downey, Bonica, & Peltin, 2007). In sum, levels of rejection sensitivity can be modified through positive interpersonal experiences, but by the time an individual reaches adulthood, accumulated experiences with rejection can make this change more difficult.

Self-regulation. Corrective experiences are not the only means through which the ill effects of rejection sensitivity can be reduced. Self-regulation, or attentional control, may also buffer individuals with high levels of rejection sensitivity from interpersonal problems. In a longitudinal study that followed preschool children for 20 years, rejection sensitivity was associated with increased personal difficulties (e.g., lower levels of self-worth, self-esteem, and coping ability) (Ayduk et al., 2000). However, self-regulation (assessed through a delay of gratification task in preschool) moderated this association, such that participants who were highly sensitivity to rejection and high in self-regulation did not report more interpersonal difficulties than participants who were low in rejection sensitivity. In other words, highly rejection sensitive individuals with an

increased ability to delay gratification were comparable, on all measures, to individuals who were low in rejection sensitivity (Ayduk et al., 2000).

Executive control, the ability to override an automatic reaction (e.g., intense anger) with a more appropriate response (e.g., considering the other person's perspective), has also been shown to moderate the negative effects of rejection sensitivity (Ayduk et al., 2008). Despite these optimistic findings, it appears that moderating the effects of rejection sensitivity levels is possible, however, the self-fulfilling nature of rejection sensitivity coupled with the deeply ingrained expectations into the defensive-motivational system makes behavior change unlikely (Downey et al., 1999). Although the focus thus far has been on rejection sensitivity, applied to general interpersonal experiences, stigma-based rejection sensitivity is another important risk factor for individuals with a potentially stigmatizing status.

Stigma-Based Rejection Sensitivity

Rejection sensitivity deals with individuals anticipating interpersonal rejection because of their beliefs and previous experiences with rejection, whereas stigma-based (also called status-based) rejection sensitivity arises from the belief that one is rejected due to one's membership in a stigmatized group. Stigma-based rejection sensitivity occurs when experiences of rejection based on membership in a stigmatized group causes individuals to anxiously or angrily expect, readily perceive, and intensely react to rejection based on that devalued categorization (Mendoza-Denton et al., 2002).

Mendoza-Denton and colleagues (2002) tested the idea of stigma-based rejection sensitivity by tracking a sample of incoming African American Freshmen at a

predominately White university for three years. African American students who scored higher on a measure of race-based rejection sensitivity reported greater discomfort during the transition to college, less trust in the university itself, and relative declines in grades over a three-year period. It is apparent that belonging to a stigmatized group and experiencing recurring interpersonal rejection can result in high levels of rejection sensitivity, which can further hinder the lives of stigmatized individuals (Downey et al., 1999; Mendoza-Denton et al., 2002).

I believe that people living with HIV/AIDS will anticipate higher levels of rejection due to their membership in such a highly stigmatized group and that this rejection sensitivity will have a negative impact on their romantic functioning. In the following section, I will touch on the ways in which stigma, in general, and HIV/AIDS-related stigma can lead to interpersonal rejection.

Conceptualization of Stigma

The term *stigma* is derived from a Greek word that originally referred to a specific tattoo marking that was burned or cut into the skin of criminals, slaves, and traitors. These tattoo markings identified certain individuals as morally corrupt and signaled the general public to shun or avoid these blemished persons (Frey, 2003). Current definitions of stigmatization highlight the ways in which individuals and social groups are devalued, discredited and discriminated against for possessing a variety of stigmatizing attributes (Crocker & Major, 1989; Goffman, 1963). Stigmatized individuals are labeled as unwanted or spoiled (Jones et al., 1984) and this allows others to treat stigmatized persons less humanely and justify their discriminatory behavior (Crandall & Coleman,

1992). Historical and modern definitions of stigmatization both show that social rejection is inherent in the experience of stigma.

Goffman (1963) defines three categories of stigma that have been found consistently across cultures and throughout history. Stigma can result from overt or external deformities (e.g., leprosy or a cleft lip), deviations in personal traits (e.g., possessing a mental disorder or being imprisoned), and from tribal associations (e.g., affiliating with a specific nationality or religion) (Goffman, 1963). It is apparent that a wide variety of stigmatizing attributes exists, but a number of factors determine how specific stigmas are experienced. Jones and colleagues (1984) theorized that stigma comprises six dimensions that can influence the ways in which a particular stigma leads to negative interpersonal outcomes. These dimensions include: concealability (i.e., Can the condition be hidden or is it obvious?), course (i.e., How does the condition change over time?), disruptiveness (i.e., Does it hinder interactions?), aesthetic qualities (i.e., Does the condition make the possessor ugly or upsetting to others?), origin (i.e., Was the person responsible for the condition?), and peril (i.e., How serious and dangerous is the condition?) (Jones et al., 1984). Stigmas are associated with stereotypical characterizations and are often rooted in irrational or unfounded fears, mass hysteria, lack of education/information, and ignorance (Kurzban & Leary, 2001). The discrediting and rejecting nature of stigma has been shown to negatively impact stigmatized individuals in a myriad of ways.

Effects of Stigmatization

Stigmatization is an obtrusive and damaging experience that permeates the lives of stigmatized individuals. The influence of stigma on the lives of stigmatized individuals has been well documented (e.g., Jones et al., 1984). Stigmatized individuals are devalued, rejected, ostracized, discriminated against, and sometimes physically and verbally attacked (Heatherton, et al., 2000). Because stigmatized individuals are devalued and treated in a dehumanized manner, stigma can lead to severe losses in self-esteem and self-worth (Crocker & Quinn, 2000).

Stigma is essentially rejection (Miller & Kaiser, 2001) and the result of this prolonged rejection manifests itself in a number of damaging ways. I have already touched on stigma-based rejection sensitivity and its negative consequences (Mendoza-Denton et al., 2002). Stigmatization is associated with symptoms of depression and anxiety, as well as less satisfaction with life (Link, Struening, Rahav, Phelan, & Nuttbrock, 1997; Markowitz, 1998). Stigma is linked with isolation, psychological distress, and even self-hatred (Crandall & Coleman, 1992). The discrimination that results from being a member of a stigmatized group can lead to the loss of employment and social support which further exacerbates the negative psychological effects of stigma (Altman, 1986).

Stigma can lead to negative outcomes even if the stigmatized individual is unaware of the negative treatment and views surrounding their stigmatizing attribute. One powerful way that stigma can lead to behavioral changes is through self-fulfilling

prophecies, where an erroneous stereotypical belief that is initially incorrect leads to its own fulfillment (Merton, 1968; Rosenthal & Jacobson, 1968).

Self-fulfilling prophecies have been implicated in a variety of social stereotypes, including: gender (e.g., Skrypnek & Snyder, 1982; Zanna & Pack, 1975), physical attractiveness (e.g., Frieze, Olson & Russel, 1991; Snyder, Tanke, & Berscheid, 1977), ethnicity, obesity (e.g., Crandall, 1991), and socioeconomic status (e.g., Rist, 1970). Jussim and colleagues (2000) theorize that self-fulfilling prophecies can help to sustain stigma and seem to provide justification for the continued mistreatment of stigmatized groups. Because people behave in a manner that confirms their original, incorrect beliefs, they may see the subsequent belief-consistent behaviors of stigmatized individuals as "evidence" to further justify their negative attitudes.

Past experiments designed to test self-fulfilling prophecies typically utilized dyadic-interactions, in which one or both partners in the interaction holds a stereotypical belief about the other, which elicits stereotype-consistent behavior from the target(s) and subsequently leads to behavioral confirmation (e.g., Downey & Feldman, 1996; Snyder, et al., 1977). In one such study, male participants interacted with females they believed to be either physically attractive or unattractive (experimentally manipulated) via a telephone (Snyder et al., 1977). The females were not aware of which experimental condition to which they belonged. Naïve raters judged the recordings of the telephone conversations and found evidence for a self-fulfilling prophecy. The females that were thought to be attractive (unbeknownst to them) were rated as more friendly and likable when compared with the females who were thought to be unattractive. The male

participants elicited stereotypical behavior (friendly and likable conversation) from the "attractive" female participants, which lead to behavioral confirmation that was recognized by the objective raters (Snyder et al., 1977).

The self-fulfilling prophecy is a useful paradigm for understanding stigmatization and rejection sensitivity. Nonstigmatized others may erroneously anticipate negative characteristics (e.g., careless and stupid) in a stigmatized person and, through behavioral confirmation, elicit these unwanted traits. Stigmatized individuals may come to expect rejection from others because of their history with rejection and stigma (Downey et al., 1998). Stigma-based rejection sensitivity has been shown to powerfully influence the lives of stigmatized individuals (Mendoza-Denton et al., 2002), and I believe that people living with HIV/AIDS will have an enhanced sensitivity to rejection because of their stigmatized status. This anticipation of rejection can lead to relationship damaging thoughts and behaviors that increase the likelihood of rejection for the stigmatized partner (Downey & Feldman, 1996; Sroufe, 1990). Individuals who expect rejection inadvertently harm their romantic relationships, further increasing the amount of rejection they experience. Therefore, I predicted that HIV-positive individuals with high levels of rejection sensitivity, resulting from stigmatization, would be less happy with their romantic relationships. I will now discuss why HIV/AIDS is a highly rejecting experience that is likely to lead to high levels of rejection sensitivity.

HIV/AIDS-Stigma

HIV/AIDS-stigma defined. HIV/AIDS stigma is reflected in the unfavorable policies, beliefs, and attitudes that are directed at people perceived to have HIV/AIDS

(Brimlow, Cook & Seaton, 2003). HIV/AIDS stigma pertains to prejudice and discriminatory acts which are aimed at individuals who are infected with the virus.

Why is HIV/AIDS so stigmatizing? Goffman (1963) hypothesized that diseases would be most stigmatizing if there is little public knowledge or understanding regarding the illness and if they are concealable. Furthermore, conditions that are incurable, progressive, and transmissible to others result in high levels of stigmatization (Jones et al., 1984). It is obvious that HIV/AIDS fits this characterization of a highly stigmatizing condition. Because of the contagious nature of the disease, people living with HIV/AIDS are perceived as placing others at risk and are often blamed for acquiring the disease through risky behaviors (Herek & Glunt, 1988). Irrational fears of contagion can result in extreme social rejection and isolation for those living with HIV/AIDS.

The stigma surrounding HIV/AIDS is augmented by the fact that AIDS was previously considered to be a terminal illness. Individuals in the advanced stages of the disease are often visibly ill; the disfiguring symptoms that are associated with AIDS hamper social interactions and increase the possibility for stigmatization to occur because they remind others of illness and death (i.e, due to instrumental stigma). Thinking about, or being surrounded by, people living with HIV/AIDS, or any terminal illness, will remind seronegative individuals of their own mortality. Awareness of the inevitability of death can arouse feelings of anxiety, which may lead to social and physical distancing (Herek & Glunt, 1988).

HIV/AIDS is also a highly stigmatizing condition because it is often defined as a disease of marginalized groups. The co-occurrence of multiple stigmatizing attributes is

often described as “layers of stigma” (Herek, 1999) or “double stigma” (Grossman, 1991). HIV/AIDS stigma is amplified because it is layered on top of preexisting stigma (Herek & Glunt, 1988) and public perceptions are inextricably linked to the groups most often associated with the disease (e.g., intravenous drug users, sex workers, and homosexuals) (Crawford, 1996). Herek and Glunt (1988) state that, “AIDS thus provides many people with a metaphor for prejudice – a convenient hook upon which to hang their hostility toward out-groups.” (p. 889). Victim blaming occurs frequently with seropositive individuals, but blaming the already devalued groups associated with HIV/AIDS is more common (Herek & Glunt, 1988). In sum, stigma related to HIV/AIDS is not a singular entity, but instead, it is comprised of layers of stigma that are a combination of personal characteristics (such as race, ethnicity and gender) and the routes of HIV transmission (e.g., intravenous drug use and sex work) (Reidpath & Chan, 2005).

HIV/AIDS stigma certainly meets the aforementioned criteria for a highly stigmatizing condition. Individuals living with HIV/AIDS report significantly more stigma than individuals living with other stigmatized illnesses, such as cancer and herpes (e.g., Fife & Wright, 2000; Peters, den Boer, Kok, & Schaalma, 1994). The strength of HIV/AIDS-stigma is related to its association with a fatal, transmissible disease and with the “tribal stigma” (or layered stigma) that results from the disease’s association with other stigmatized groupings. Despite the fact that the amount of HIV-related stigma has decreased slightly over the years in the United States, the level of stigma is still severe

and has profound consequences for those affected by the disease (Herek & Capitanio, 1993/1998).

Effects of HIV-stigma. HIV/AIDS stigma is thought to be the most crucial psychological phenomenon that is associated with disease (Crandall & Coleman, 1992), therefore, understanding the AIDS epidemic within the United States requires an awareness of the associated widespread stigmatization (Herek & Glunt, 1988). Lee and colleagues (2002) reason that HIV-related stigma has negative consequences for everyone, not just individuals living with HIV/AIDS. HIV-stigma has been shown to hinder people's decisions to get tested for the virus and to seek medical treatment (Chesney & Smith, 1999). Stigma is also related to a decrease in disclosure of serostatus to others, which leads to more psychological distress and isolation for people living with the disease and an increased likelihood of engaging in risky sex (Wegner et al., 1994). People living with HIV/AIDS may not disclose their status to others out of fear of the negative consequences that can accompany such disclosure, such as: physical violence, interpersonal hostility, discrimination, and rejection (Chesney & Smith, 1999). The delaying of testing and inhibiting disclosure that results from stigma can increase transmission of the virus.

Receiving an HIV-positive diagnosis typically entails the loss of important self-definitional roles, such as the self as a healthy individuals and the self as a lover. Because of this reduction in self-relevant roles, decreases in self-esteem are thought to emerge from comparisons between the present self and former self (Crandall & Coleman, 1992).

HIV/AIDS stigma may also lead to a self-fulfilling prophecy, whereby individuals who are diagnosed with HIV anticipate problems in their social life because of their HIV-status and withdraw from their normal social interactions, which can lead to further alienation (Goffman, 1963). However, a self-fulfilling prophecy is not required for these interpersonal problems. Rejection in the form of loss of employment and removal of social support from family and friends is typical following an HIV diagnosis (Altman, 1986). HIV/AIDS-stigma in particular can lead to high levels of rejection and isolation for individuals living or associated with the disease. Crystal and Jackson (1989) found that 38% of HIV-positive gay men had been rejected by their friends and 31% of the sample reported being rejected by at least one family member upon disclosure. Thus, HIV/AIDS-stigma may directly and indirectly disrupt the social lives of people living with the disease. The interpersonal disturbances experienced by many people living with HIV/AIDS can influence the way they anticipate and deal with future rejection.

The amount of stigmatization that individuals living with HIV/AIDS report varies significantly from person to person. Crandall and Coleman (1992) found that the majority of respondents in their study reported feeling "a little" stigmatized, anxious, and depressed. However, other participants in this sample reported feeling "not at all" stigmatized or "extremely" stigmatized, suggesting a wide range of perceived stigmatization in people living with HIV/AIDS. Recent studies (Bunn, Solomon, Miller & Forehand, 2007; Lee et al., 2002) have also found similarly varying levels of perceived stigma. Those who did feel stigmatized because of their positive HIV-status also reported feeling depressed, anxious, alienated, and distrustful of others as a result of

disruptions in their social relationships, and these negative effects were shown to be independent of disease severity (Crandall & Coleman, 1992; Gonzalez, Solomon, Zvolensky, & Miller, 2009).

Internalization of HIV/AIDS- stigma. Goffman (1963) theorized that individuals know what it is like to be "normal" and what it means to be stigmatized long before they themselves are the targets of stigma, and that this influences how stigma affects the self. Because the majority of people living with HIV/AIDS were not born with the disease, they are thought to have internalized and accepted the stereotypes associated with the disease through socialization processes before receiving their positive diagnosis (Fife & Wright, 2000). After contracting HIV, the illness becomes personally relevant to the individual and the previously held stereotypes can decrease self-worth (Jones et al., 1984).

Individuals living with HIV/AIDS vary in the extent to which they internalize society's negative attitudes toward the disease and these differences have a substantial affect on their well-being. A person living with HIV/AIDS who has severe symptoms, comes from a family that is not accepting, and/or was recently diagnosed with the disease will typically have higher levels of internalized stigma than a person with HIV/AIDS who has fewer symptoms, an accepting family, and/or has not been recently diagnosed (Lee et al., 2002). Internalizing stigma has been linked with self-deprecation and a decrease in perceived personal control in a sample of HIV-positive individuals. High levels of internalized HIV-stigma have been linked with self-hatred (Crandall & Coleman, 1992), psychological distress (Lee et al., 2000) decreases in perceived control

(Fife & Wright, 2000), and fear of spreading the disease (Lee et al., 20002). Internalization of HIV/AIDS stigma is yet another way that rejection sensitivity may be increased for people living with the disease.

HIV/AIDS-Stigma and Romantic Relationships

Importance of Relationships

I described just some of the many ways in which the rejecting experience of stigma can impair quality of life, social interactions, and self-esteem. The simplest definition of social stigma is rejection due to an unwanted or unvalued characteristic (Goffman, 1963). Being subjected to repeated instances of rejection is likely to influence how individuals function in all of their interpersonal relationships, but romantic relationships seem to be especially impacted by these rejecting experiences (Downey & Feldman, 1996). I believe that, due to the nature of the disease and the associated stigma, people living with HIV/AIDS will have additional challenges to face within their romantic relationships. Furthermore, individuals living with HIV/AIDS who experience high levels of stigmatization will be more likely to have decreases in romantic relationship satisfaction than those who experience less stigma.

There is no doubt that stigma has dramatic, direct influences on the individuals who are living with HIV/AIDS (Herek, 1990). Equally important are the ways through which stigma can influence the social world of people living with HIV/AIDS, which can have tremendous impacts on their health and psychological well-being. Adequate social functioning and support has been shown to be vital for the healthy development of all human beings (Simon, 2002). The physically and psychologically taxing nature of

HIV/AIDS is thought to increase the necessity and importance of such social functioning for those living with the disease (Herek, 1999). Social support has been shown to be a robust predictor of health outcomes for people living with HIV/AIDS, and this predictive power is independent of initial medical status and predominant coping style (Ashton et al., 2005). Examining how stigma influences interpersonal functioning is a worthy endeavor, and the work on courtesy stigma demonstrates that researchers have begun to consider the effects of stigma at the dyadic level (Wight et al., 2006). Unfortunately there are few studies on the relationship between stigma and dyadic functioning, especially with regard to HIV/AIDS-stigma. Being in a committed relationship with a stigmatized significant other is likely to influence both members of the dyad and the relationship dynamics as a whole.

Romantic relationships are particularly relevant to HIV/AIDS-stigma because of the nature of the disease. Much of the research examining the romantic and sexual relationships of seropositive individuals has been qualitative in nature (see Barroso & Powell-Cope, 2000 for a review) and/or focused on risky sexual behavior and disclosure concerns (e.g., Greene et al., 2002; Niccolai, Dorst, Myers, & Kissinger, 1999; Palmer & Bor, 2001; VanDevanter et al., 1999; Varni, Miller, & Solomon, 2009).

Studies of Other Marginalized Relationships

The influence of stigma on romantic dyads in general has largely been ignored. Even less attention has been given to the effects of stigma on the romantic relationships of people living with HIV/AIDS. Although there is little known about the ways in which HIV-stigma influences romantic relationships, a few current studies have focused on the

effects of being a partner in a stigmatized, or marginalized, relationship. Marginalized relationships are nontraditional romantic partnerships that are stigmatized by the general public. These socially devalued romantic relationships include same sex, interracial, and interfaith pairings as well as relationships with age gaps of ten years or greater between partners (Lehmiller & Agnew, 2006). A relationship is considered to be marginalized if the individuals within the relationship perceive disapproval from society as a whole and within their social networks (Lehmiller & Agnew, 2007).

Much of the research on marginalized relationships uses commitment as the primary measure of relationship success and quality. Commitment is often the outcome of interest in romantic relationship research because of its ability to predict breakup and consistent correlations with romantic satisfaction, investment, and evaluation of relationship alternatives (Le & Agnew, 2003; Rusbult, 1980). Individuals who perceived high amounts of relationship marginalization reported lower levels of commitment and relationship investments. However, those who perceived high levels of marginalization within their relationship appear to compensate for their lack of investment by devaluing relationship alternatives (Lehmiller & Agnew, 2006). In other words, individuals thought who felt that they were in a marginalized relationship, invested less in their relationship but also devalued other alternative/potential partners.

In a longitudinal analysis of marginalized relationships (specifically, same-sex, age gap and interracial relationships), Lehmiller and Agnew (2007) found that perceived social network marginalization, but not societal marginalization, predicted breakup 7-months later. Social network marginalization entails rejection from a person's family and

friends, while societal marginalization deals with perceived rejection from society as a whole. Commitment levels at time one completely mediated the relationship between social network marginalization and relationship dissolution. And for those participants who remained in their relationships throughout the study, perceived social network marginalization predicted commitment levels beyond the effects of satisfaction, investments, and relationship alternatives (Lehmiller & Agnew, 2007). Those who perceived more marginalization from their close network of friends, family, and peers reported lower levels of commitment to their relationship, which predicted breakup. Surprisingly, societal marginalization was not predictive of relationship outcomes. These findings suggest that societal disapproval in general is not vital to relationship functioning for marginalized couples, but the perceived views of important others within their social network have drastic impacts on relationship outcomes.

Romantic relationships in which one, or both, partners have HIV/AIDS are marginalized because of the stigma surrounding the disease. Relationship satisfaction (resulting from lowered commitment and investment) is thought to decrease as awareness of the stigmatized nature of the relationship increases, thus, individuals living with HIV/AIDS and in a romantic partnership will have additional strains on their relationship if they perceive more stigmatization. Couples in which one or both partners have HIV/AIDS will have an increased risk of relationship dissatisfaction and dissolution if they perceive high amounts of stigmatization from within their social network. It is clear from the research on marginalized romantic relationships that stigmatization (by

important others) can have damaging effects that impair relationship satisfaction and longevity.

Stigma and Romantic Relationships

Although only a handful of studies have examined the relationship between stigma and relationship satisfaction, the findings consistently show that stigma is harmful to romantic relationships. Mohr and Fassinger (2006) found a negative association between stigma sensitivity and romantic relationship satisfaction in same-sex couples. Participants who reported experiencing high amounts of stigma were less satisfied in their relationships.

Kurdek (1991) examined the correlates of relationship satisfaction in a sample of gay and lesbian cohabitating couples. Problem solving skills, adequate social support, and a high level of relationship investment were positively correlated with relationship satisfaction and self-consciousness and dysfunctional relationship beliefs were negatively correlated with relationship satisfaction. Marginalization, or high levels of stigma, has been shown to hinder problem solving, decrease social support and relationship investments while increasing self-consciousness and dysfunctional relationship beliefs. (Kurdek, 1991; Lehmiller & Agnew, 2007; Murray et al., 2001). In sum, stigma has been shown to adversely influence the factors that appear to be vital for a satisfying romantic partnership. I believe that this is one avenue through which stigma can hinder the relationship satisfaction of people living with HIV/AIDS.

Relationship Issues Related to HIV/AIDS

I hypothesized a similar relationship between stigma and relationship dissatisfaction for individuals living with HIV/AIDS. I argue that examining rejection sensitivity as a potential mediator in this association will further our understanding of the influence of stigma on romantic relationships. Mohr and Fassinger (2006) note that the role of stigma in romantic relationship functioning has received little attention from researchers. Furthermore, the authors warn that generalizing between different stigmatized couples may be difficult because the actual stigmatizing characteristics may uniquely affect relationship dynamics. HIV/AIDS stigma encompasses many potentially relationship damaging characteristic (e.g., transmission through sexual contact, care giving by partners, and strains on mental and physical health), which I believe will strengthen the relationship between stigma and relationship satisfaction. Due to the nature of the disease, I argue that the stigma faced by individuals living with HIV/AIDS who are in romantic pairings deserves special consideration.

HIV transmission most commonly occurs within the context of sexual relations, and, therefore, it is likely to occur in personal and intimate relationships (Kalichman, 2000). Even if HIV transmission does not occur through a romantic relationship, having one or both partners with HIV/AIDS in a romantic pairing can lead to unique and increased interpersonal challenges not faced by seronegative couples. Issues that seronegative couples deal with, such as, sexual intimacy, financial problems, and health concerns appear to be exponentially more stressful for those living with HIV/AIDS (Kalichman, 2000).

The trajectory of HIV/AIDS has changed drastically in recent years with the advent of effective treatments, such as highly active antiretroviral therapy (HAART), which prolong the lifespan and increase the quality of life for those living with the virus (Kalichman, 2000). Having an HIV-positive diagnosis is no longer the death sentence it once was, and this is likely to influence the course of romantic relationships for seropositive individuals. People living with HIV/AIDS often rely on non-familial sources of support and do not disclose their status to their family of origin (Harvey & Wenzel, 2002). Romantic partners of seropositive individuals are in a unique position because they are often the only source of emotional and instrumental support for people living with HIV/AIDS (Britton, Zarski, & Hobfoll, 1993; Kalichman, 2000; VanDevanter, Thacker, Bass, & Arnold, 1999).

On a more positive note, there is some evidence to suggest that that romantic relationships can provide a buffer from the psychological distress of living with a stigmatized illness. Kalichman (1998) reported that individuals who were in a romantic relationship, for at least six months in duration, used less avoidant coping strategies and reported fewer symptoms of somatic distress.

A large portion of the romantic relationship literature on people living with HIV/AIDS has been qualitative and focused on finding themes in unstructured interviews. Because of the nature of HIV/AIDS, those living with the disease frequently reported anxiety over planning for the future, especially in terms of reproduction, transmission of HIV/AIDS, disclosing their seropositive status to family members, allocating financial and social support, coping with stigma and facing their own mortality

(Haas, 2002; Palmer & Bor, 2001; Remien, Carballo-Dieguez & Wagner, 1995). Although not all of these challenges are unique to couples dealing with HIV/AIDS (e.g., family planning), the additional strain and uncertainty stemming from the disease can exacerbate these issues.

Qualitative research has delineated some of the major relationship issues faced by people living with HIV/AIDS, but, unfortunately, most of these topics have not been studied in detail. Transmission of HIV through risky sexual practices and disclosure concerns are two exceptions, with both areas of research receiving copious amounts of attention.

Courtesy Stigma

As mentioned earlier, HIV-related stigma is not limited to those who are infected with the virus. Courtesy stigma, as defined by Goffman (1963), is the stigmatization of people associated with already stigmatized individuals. Courtesy stigma may apply to anyone who is connected with HIV, such as: family members, romantic partners, peers, and even volunteers (Snyder, Omoto, & Crain, 1999). Wight and colleagues (2006) demonstrated in a sample of AIDS caregiving dyads that courtesy stigma (experienced by caregivers) can be distinguished from personal stigma (experienced by seropositive individuals). In this study, caregivers were mothers or wives of the HIV-positive participants. As expected, perceived stigma was higher in the person living with HIV. Additionally, wife caregivers perceived more courtesy stigma than mother caregivers, creating even more stressful circumstances for those in a romantic relationship. Caregivers and people living with HIV/AIDS both experienced and anticipated rejection

because of their association with the disease (Wight et al., 2006). It is likely that this rejection can exert a substantial, negative influence on the interpersonal functioning of those living with HIV/AIDS and their caregivers (Kalichman, 2000). Courtesy stigma is yet another manner in which the stigma relating to HIV/AIDS can negatively impact romantic relationship satisfaction.

Sexual Risk

As previously mentioned, much of the research on the romantic relationships of people living with HIV/AIDS has focused on risky sexual practices. I will explain some of the major findings that have implications for the functioning and safety of those in romantic pairings. There appears to be no consensus on behalf of medical professionals or people living with HIV/AIDS regarding what constitutes "risky" sexual behaviors in serodiscordant or concordant partnerships (Halkitis, Zade, Shrem, & Marmor, 2004; Remien et al., 1995). For example, there is confusion regarding the actual transmission rates and risk associated with oral sex, heterosexual versus homosexual intercourse, and unprotected intercourse between concordant partners. The ambiguity surrounding sexual risk further complicates the romantic relationships of HIV/AIDS. Unprotected intercourse occurs most often for those who are in a committed relationship or dating a partner of positive or unknown serostatus (Niccolai, D'Entremont, Pritchett, & Wagner, 2006). Recurrent worries regarding infecting a romantic partner can remind individuals living with the disease of their stigmatized status, which has been shown to hinder romantic functioning.

Niccolai and colleagues (2002) discovered that seropositive individuals often do not have accurate knowledge of their romantic and sexual partner's serostatus. This finding further complicates the already stress-inducing concern over transmission. The sexual risk literature suggests that those who are in committed relationships may be more likely to engage in unprotected intercourse and lack accurate knowledge about their partner's serostatus, which increases the likelihood of transmission. Individuals living with HIV/AIDS report that engaging in sexually risky behaviors arouses feelings of guilt, shame, and relationship dissatisfaction.

Disclosure of HIV/AIDS Status

Disclosure concerns and decisions are a prominent source of stress for those who are infected with HIV. Choosing not to disclose, or hiding one's HIV-positive status, often leads to decreased amounts of social support at a time when interpersonal assistance is crucial (Herek, 1990; Holt et al., 1998). Conversely, fear of disclosure is often motivated by anticipated violence, abandonment, or abuse that can accompany disclosure (Jarman, Walsh, & De Lacey, 2005; Rothenberg & Paskey, 1995; Siegel, Lekas, & Schrimshaw, 2005). Individuals also decide not to disclosure out of a desire to protect important others, especially family members, from psychological distress (Kalichman, 2000; Marks et al., 1992). Such disclosure decisions are often made while considering the amount of social stigma that surrounds HIV/AIDS, with individuals who report higher amounts of HIV-related stigma also endorsing more reasons against disclosure and disclosing less often to important others (Greene et al., 2002).

Individuals who choose to disclosure their HIV-status may also have to come out about their sexual orientation, sexual history, or history of drug use, which is likely to increase distress and stigmatization (Brown et al., 1996; Kalichman, 2000). Qualitative interviews reveal that disclosing one's HIV status can be a recurring source of stress but also can be used as mechanism to cope with the disease (Holt et al., 1998).

Rejecting Experiences

Stigma, by definition, is a highly rejecting experience (Kurzban & Leary, 2001; Miller & Kaiser, 2001). Rejection specifically stemming from romantic relationships is a common occurrence for those living with HIV/AIDS. Nearly one-third of seropositive women reported significant changes in their romantic relationships upon disclosure and almost two-thirds of these women also reported disruptions in their sexual relationships (Pergami et al., 1993). Because of the prevalence of rejection associated with HIV/AIDS, I am particularly interested in the ways in which previous experiences with rejection can influence how a person anticipates and responds to rejection within romantic relationships.

Stigma and Rejection Sensitivity

The previous section described stigma as a rejecting experience, but few studies have directly examined the relationship between stigmatization and sensitivity to rejection. In an analysis of support seeking and rejection in stigmatized individuals (abused women and women in poverty), Williams and Mickelson (2008) found moderate correlations between perceived stigma and fear of rejection. The authors theorized that individuals who perceived high amounts of stigma (relating to domestic abuse or poverty)

would be reluctant to seek social support directly (i.e., asking for help). Stigmatized individuals were thought to have utilized indirect support seeking instead, which often leads to unsupportive responses from others (i.e., rejection and avoidance). Indirect support seeking is subtler than directly asking for help, and often entails complaining or dropping hints about problems. In line with this hypothesis, participants who perceived high amounts of stigma utilized indirect support seeking more often, which was positively associated with rejecting, or unsupportive, responses. Fear of rejection partially mediated the relationship between stigma and indirect support seeking (Williams & Mickelson, 2008). Fear of rejection was associated with stigma and dissatisfaction with social support, with indirect support seeking explaining part of this relationship. Although I am focused on rejection sensitivity, indirect support seeking may be another route through which stigma influences romantic relationship dissatisfaction.

Rationale for Current Study

The present study investigated how the romantic relationships of people living with HIV/AIDS are influenced by stigma. Little is known about the romantic relationships of seropositive individuals even though research suggests that romantic relationship status and quality can have huge impacts on the quality of life of those living with the disease (Kalichman, 2000). Equally sparse is the literature on the ways stigma can influence romantic relationships. The results of the current study can generalize to a variety of stigmatized individuals, and not just those living with HIV/AIDS. Because there are few studies that examine the romantic functioning of stigmatized individuals and marginalized couples, it is unclear how being in an intimate relationship will

influence the experience of stigma. I reasoned that people living with HIV/AIDS, or any stigmatizing condition, experience a disproportionate amount of interpersonal rejection throughout their lifetime, in comparison with non-stigmatized individuals. These repeated rejection experiences often lead to an enhanced sensitivity to rejection, which has been shown to be maladaptive in romantic relationships (Downey et al., 1998). HIV-positive individuals vary in the amount of stigmatization they perceive and I theorized that increased perceived stigma would be related to an increased sensitivity to rejection and in turn, decreased romantic relationship satisfaction.

Hypotheses

Mediation model. The current study sought to delineate one of the processes (rejection sensitivity) through which stigma influences romantic relationship quality. Based on the previous research, I hypothesized the following: stigma will have a negative relationship with relationship satisfaction, such that higher levels of stigma will be associated with lower levels of global relationship satisfaction (hypothesis A). Based on my analysis of the qualitative research on romantic relationships, I predicted that this association will be strongest for stigma relating to disclosure concerns and stigma that an individual experiences directly (enacted stigma). I hypothesized that this relationship will be partially mediated by rejection sensitivity, such that a significant portion of the relationship between stigma and relationship satisfaction can be accounted for by sensitivity to rejection. Because there are likely to be other processes underlying this relationship, I did not anticipate a complete mediation. In other words, the direct, negative relationship between stigma and relationship satisfaction will be reduced, but

remain significant, after controlling for rejection sensitivity. In sum, the influence of stigma on relationship satisfaction will be partially driven by levels of rejection sensitivity. I hypothesized that stigma will be positively related to rejection sensitivity, in other words higher levels of stigma will be associated with increased levels of rejection sensitivity (hypothesis B). And higher levels of rejection sensitivity will be associated with lower levels of relationship satisfaction (hypothesis C). In this mediation model, higher levels of stigma will lead to more rejection sensitivity, which will result in decreased relationship satisfaction.

Moderation. Given the results of previous research (that stigmatization can lead to a sensitivity to rejection which hinders romantic relationships), I anticipate that the mediation model I have proposed will best explain the data. However, high levels of rejection sensitivity can arise from a number of different factors, not just HIV/AIDS stigmatization that often occurs later in adulthood. As mentioned earlier, rejection sensitivity is often stable in adults and may be the result of earlier attachment experiences in childhood (Feldman & Downey, 1994). Perhaps only individuals with an already enhanced sensitivity to rejection will experience relationship problems in the face of HIV/AIDS stigma. Therefore, a moderation is possible and be will be investigated in an exploratory fashion. This moderation is based on the assumption that the association between stigma and relationship dissatisfaction is only present (or stronger) for those who are high in rejection sensitivity. If this moderation model is correct, individuals who are highly sensitive to rejection will have a stronger, negative association between the amount of stigma they experience and their romantic relationship satisfaction.

Individuals with low levels of rejection sensitivity will have a weaker, or nonsignificant, association between stigmatization and relationship satisfaction.

Method

Participants

Ninety HIV-positive participants were recruited to participate in a larger study examining how rural ecology influences the experience of coping with stigma for people living with HIV/AIDS. Of these 90 participants, 41 participants (45.56% of the entire sample) were in a romantic relationship of three months or longer at the time of participation and eligible to participate in the current study. Three participants were deleted due to missing data, leaving a total sample of 38 participants in a romantic relationship at the time of the study. Prior to data collection, I ran a power analysis with sample-size estimation software nQuery Advisor. This power analysis, using effect sizes from previous literature, estimated that 33 participants in romantic relationships would be needed for a significant effect at the .05 level.

Participants were recruited through comprehensive care clinics that provide medical services to those who are living with HIV/AIDS, community and AIDS service organizations (i.e., ASOs) as well as by word of mouth. Participants resided in the following New England states: Vermont, New York, New Hampshire and Massachusetts. Participants reported diverse racial backgrounds, the breakdown is as follows: 7 White/Caucasian, 11 Black/African American, 6 Asian, 6 Pacific Islander, 3 American Indian, and 5 did not report race. Participants ranged in age from 34-65, with a mean age of 46.58 years old (SD = 7.38). Twenty-four participants identified as male, thirteen

identified as female and one identified as transsexual. Participants described their sexual orientation on a continuum that ranged from exclusively heterosexual to exclusively homosexual, 15 participants identified as exclusively heterosexual (39.47%), 10 participants identified as exclusively homosexual (26.32%) and 13 participants identified as somewhere in the middle of the continuum (34.21%). Of the 38 participants included in this study, 17 (44.74%) described their romantic relationship status as committed (never married or civil unioned), 9 (23.68%) as married, 3 (7.89%) as in a civil union and 9 (23.68%) as divorced. Participants reported the length of their current romantic relationship, which ranged from 3 months to 25 years (M = 9.28 years, SD = 7.06)

Materials

HIV stigma. Perceived HIV/AIDS-related stigma was measured with the revised HIV Stigma Scale (Bunn et al., 2007). Berger, Ferrans & Lashley (2001) designed the original HIV Stigma Scale to measure the HIV-stigma perceived by those living with the disease. Bunn and colleagues (2007) revised the scale to refine the subscales; specifically they eliminated items that loaded on more than one scale (i.e., cross-loading items).

This 32-item scale consists of four subscales. For each item, participants indicated their agreement on a 5-point scale (see Appendix A). Enacted (or Personalized) Stigma (α = .92) measures the interpersonal outcomes that result from others knowing the participant's HIV-status (e.g., I lost friends by telling them that I have HIV/AIDS). Disclosure Concerns (α = .88) measures the worries and concerns about concealing one's seropositive status (e.g, I work hard to keep my HIV/AIDS a secret). Negative Self-Image (α = .87) measures detriments in the self-concept as a result of social comparisons

with others (e.g., Having HIV makes me feel unclean). The Concern with Public Attitudes subscale (α = .71) measures the HIV-positive individuals' beliefs about what others think about people living with HIV/AIDS (e.g., Most people think that a person with HIV/AIDS is disgusting). In a prior study, the HIV stigma scale correlated with self-esteem scores for HIV-positive individuals (Bunn et al., 2007). The Revised HIV Stigma Scale has good internal consistency for the subscales and total score (α = .95, this study). I utilized the subscale scores in my analyses to examine how distinct aspects of stigma influenced relationship satisfaction.

Layered Stigma. The Layered Stigma measure (α = .75) assesses perceptions of stigma at the group and individual level. Previous studies have shown that people tend to perceive more stigma for their group than for themselves personally (Taylor et al., 1990). In addition, individuals can experience stigma as a result of a number of characteristics (e.g, HIV/AIDS status and sexual orientation). This newly developed measure assesses how much stigma individuals experience and how much stigma they believe groups they belong to experience (see Appendix B). Participants indicated their agreement, on a 5-point Likert-type scale, with various statements of individual and group discrimination (e.g. "People with HIV/AIDS are discriminated against" and "I experience discrimination because I have HIV/AIDS"). This scale contained similar questions for each of the following groupings: gender, ethnicity, income level, HIV/AIDS status, religion, and sexual orientation (e.g., "People of my ethnicity discriminated against"). The layered stigma measure provides two scores, an individual stigma score (i.e., how much stigma does the individual perceive as happening to them) and a group stigma score (i.e., how

much stigma does the individual perceive as happening to their group as a whole), both of which I utilized in my analyses.

For this measure of stigma, I employed the overall amount of stigma experienced across all of the domains listed, and not just stigma relating to HIV/AIDS. I chose to utilize the overall stigma score because I hypothesized that stigma in general (i.e., not solely HIV/AIDS stigma) would influence rejection sensitivity levels and subsequently, relationship satisfaction. Furthermore, HIV/AIDS is highly stigmatizing, but individuals may vary in what they consider to be their most stigmatizing characteristic. It is also possible that individuals who report several layers of stigmatization may have an even higher sensitivity to rejection when compared to individuals who only feel stigmatized as a result of their HIV/AIDS status.

Rejection Sensitivity. The Adult-Rejection Sensitivity Questionnaire ($\alpha = .77$) is a new measure derived from the well-validated Rejection Sensitivity Questionnaire (Downey, 2008; Downey & Feldman, 1996). Descriptive statistics from an Internet sample ($N = 685$) are available for comparisons.

The questionnaire instructed participants to read nine hypothetical interpersonal situations where rejection is possible (see Appendix C). Respondents indicated how anxious they were about experiencing rejection and how much they anticipated rejection in each of the situations. For example, one situation reads: "You call a friend when there is something on your mind that you feel you really need to talk about." Participants then indicated their level of concern (e.g., "How concerned or anxious would you be over whether or not your friend would want to listen?") on a 5-point Likert-type scale (with

anchors ranging from Very Unconcerned to Very Concerned). Next, participants estimated how likely rejection was in each hypothetical situation (e.g., "I would expect that he/she would listen and support me.") by using a 5-point Likert-type scale (with anchors ranging from Very Unlikely to Very Likely).

The Adult-Rejection Sensitivity Questionnaire scale is based on the expectancy-value model. This model is multiplicative in nature, such that scores are weighted by the amount of concern and anxiety an individual has for each interpersonal situation. Scores are calculated for each situation by multiplying the level of rejection concern by the reverse of the level of acceptance expectancy. The mean of the nine situation scores is used as the total Rejection Sensitivity score. Higher scores indicate an increased sensitivity to rejection.

Relationship Satisfaction. The Relationship Assessment Scale (Hendrick, 1988) was utilized as a measure of general, or global, relationship satisfaction (see Appendix D). I chose this measure of satisfaction because it is applicable to a wide variety of romantic relationships, not just heterosexual pairings. The Relationship Assessment Scale is commonly used and well-validated. Furthermore, the Relationship Assessment Scale correlates highly with the psychometrically sound Dyadic Adjustment Scale (DAS) and moderately with the Marital Adjustment Inventory (MSI) (Hendrick, Dicke, & Hendrick, 1998). Hendrick and colleagues (1998) used this scale to predict relationship dissolution longitudinally. The Relationship Assessment Scale is internally consistent (α = .93, this study). Additionally, test-retest reliability in a sample of college students tested seven weeks apart was good (r = .85) (Hendrick et al., 1998).

Participants indicated their satisfaction with their current romantic relationship by responding to seven 5-point Likert-type statements that assess participant's general feelings of their romantic relationship (e.g., "In general, how satisfied are you with your relationship?"). Two items are reverse coded and the sum of each of the items is the total score used in my analyses, with higher scores indicating greater amounts of relationship satisfaction.

Procedure

Participants came to the lab (or field location) individually to complete a battery of questionnaires via a computer and a qualitative interview with an experimenter. Each session lasted between two and three hours. The protocol consisted of a variety of measures including: the HIV-Stigma Scale, Layered Stigma Scale, Adult-Rejection Sensitivity Questionnaire, and the Relationship Assessment Scale. All participants completed the HIV/AIDS-Stigma Scale, Layered Stigma Scale, and Adult Rejection Sensitivity Questionnaire. Participants responded to questions regarding their current romantic relationship status and duration if currently partnered. Only participants who had been in a romantic relationship of three months or longer in duration, at the time of participation, filled out the Relationship Assessment Scale. Participants completed the four measures discussed via computer in a private room, however a researcher was nearby to answer questions or assist with technical problems.

Results

Data Cleaning

Ninety HIV-positive individuals participated in this study, of those recruited 41 participants self-identified as in a romantic relationship of three months or longer at the time of participation (or 45.5%). I analyzed missing data using SPSS Missing Values Analysis. Little's MCAR (missing completely at random) test showed that the probability that the data are not missing at random is low because the chi-square test did not reach significance. Following the recommendations of Tabachnick and Fidell (2001), I inferred that the missing data are missing completely at random. I utilized listwise deletion for participants who were missing data on any of the measures, leaving a sample of 38 participants who self-identified as being in romantic relationship of three months or longer at the time of the study.

I inspected the data for plausible ranges, means and standard deviations. I evaluated the shape of the distribution by examining histograms and skewness and kurtosis statistics for each of the variables. None of the skewness or kurtosis z-scores indicated a problem with the shape of the distribution (Tabachnick & Fidell, 2001). To examine linearity and homoscedasticity, I visually inspected scatterplots of the standardized residuals and found no evidence of heteroscedasticity or departures from linearity. Inspection of the normal P-P plot of regression standardized residuals showed that the assumption regarding the independence of residuals appears to have been met. I inspected the variables for multicollinearity by examining the bivariate correlations and

tolerance statistics. The correlations among the variables did not exceed singularity criteria (r = .70) and I found no other evidence of multicollinearity.

I screened for univariate and multivariate outliers following the recommendations outlined by Tabachnick and Fidell (2001). I found four univariate outliers (two for the Relationship Assessment Scale and two for the Concern with Public Attitudes subscale of the HIV Stigma Scale), these outliers were more than three standard deviations lower than the means for each scale. I used the Winsorization method to reduce the influence of extreme scores by replacing the four scores with the next lowest, non-outlier, scores for that measure. The Winsorization of extreme scores did not change the significance of the results.

Preliminary Analyses

I explored bivariate correlations between the links of the mediation model (see Table 1). Relationship Satisfaction was negatively related to the Concern with Public Attitudes and Enacted Stigma subscales. Relationship Satisfaction had a significant, negative relationship with the proposed mediator, Rejection Sensitivity. Rejection Sensitivity had a significant, positive relationship with the Concern with Public Attitudes subscale, Negative Self-Image subscale, Enacted Stigma subscale, and Individual Layered Stigma.

The first step in testing a mediation model involves determining if there is a significant correlation between the predictor variable (stigma) and the outcome variable (Relationship Satisfaction). This was only true for Concern with Public Attitudes and Enacted Stigma. This initial step was not significant for Negative Self-Image, Disclosure

Concerns or either measure of Layered Stigma, therefore the mediation model was only tested using two predictors: Concern with Public Attitudes and Enacted Stigma.

I examined bivariate correlations between the variables of interest (Layered Stigma, HIV-Stigma total score, Rejection Sensitivity, and Relationship Satisfaction) and demographic variables. Participant gender, age, racial background, sexual orientation, and romantic relationship length/type did not correlate with the variables included in my model so I did not control for demographic variables in the analyses below.

Mediation Model

I tested my mediation model for the two stigma subscales significantly correlated with the outcome (Relationship Satisfaction). I conducted a series of regressions following the guidelines presented in Baron and Kenny (1986) to test whether Rejection Sensitivity mediates the relationship between HIV stigma (Enacted stigma and Concern with Public Attitudes) and Relationship Satisfaction. In both models, the predictor was stigma (either Enacted or Concern with Public Attitudes subscales), the outcome was Romantic Relationship Satisfaction and the proposed mediator was Rejection Sensitivity (see Figures 1 and 2 for visual depictions of these models). Figure 1 depicts the standardized regression coefficients for the relationship between Enacted Stigma and Relationship Satisfaction as mediated by Rejection Sensitivity. The standardized regression coefficient between Enacted Stigma and Relationship Satisfaction controlling for Rejection Sensitivity is in parenthesis. Figure 2 depicts the standardized regression coefficients for the Concern with Public Attitudes mediation model. The series of regressions were conducted separately for each of the stigma subscales.

In the first step of testing my mediation model, I regressed the outcome (Relationship Satisfaction) on the predictor (one of the stigma subscales). Results for the regression with Enacted Stigma as the predictor showed that it predicted Relationship Satisfaction (R^2= .18, F[1, 36]= 8.01, p <.01). In the regression with Concern with Public Attitudes as the predictor, it also predicted Relationship Satisfaction (R^2= .15, F[1, 36]= 6.57, p <.05).

In the next set of regressions, I regressed the proposed mediator on the predictor. Enacted Stigma was a significant predictor of the mediator, Rejection Sensitivity (R^2= .28, F[1, 36]= 13.69, p <.001). Concern with Public Attitudes was also a significant predictor of Rejection Sensitivity (R^2= .13, F[1, 36]= 5.43, p <.05).

Next, I utilized a set of simultaneous multiple regressions, where the outcome was regressed on the predictor and the mediator. Regressing Relationship Satisfaction on Enacted Stigma and Rejection Sensitivity simultaneously predicted a significant amount of variance in Relationship Satisfaction (R^2= .22, F[2, 35]= 4.95, p <.05). Similarly, regressing Relationship Satisfaction on Concern with Public Attitudes and Rejection Sensitivity predicted a significant amount of variance in Relationship Satisfaction (R^2= .22, F[2, 35]= 5.09, p <.05).

Lastly, I tested the significance of the mediation model with the bootstrapping method and Sobel tests. The Bootstrapping method was utilized to compare the influence of the predictor (Enacted or Concern with Public Attitudes) in the first and third regressions. Specifically, the bootstrapping method estimated the indirect effects from 5000 resamplings of the same data set. The bootstrapping method provides estimated

indirect effects with 95% confidence; the true estimated indirect effect for Enacted Stigma lies between -.2685 and .0404, and the estimated indirect effect for Concern with Public Attitudes lies between -.6629 and .0113. Because the estimated indirect effects include zero in the 95% confidence interval, I concluded that the indirect effects for both predictors are not significantly different from zero (Preacher & Hayes, 2004/2008). A Sobel test comparing the Beta weights mirrored these results for both Enacted Stigma (z =-1.20, *ns*) and Concern with Public Attitudes (z =-1.35, *ns*).

Moderation Model

Although my analysis of the existing literature indicated that rejection sensitivity would mediate the relationship between stigma and relationship satisfaction, it is also possible that it moderates the relationship. In other words, stigma may be more or less harmful to relationship satisfaction depending on how sensitive to rejection the individual is. I tested the moderation model following the procedures outlined in Baron and Kenny (1986). I ran a two-step hierarchical multiple regression for each stigma variable (Enacted Stigma, Concern with Public Attitudes, Disclosure Concerns, and Negative Self-Image, Layered Stigma Group and Layered Stigma Individual) to test whether Rejection Sensitivity levels moderated the relationship between stigma and Relationships Satisfaction. Table 2 summarizes the results of these regressions.

In step one of the regressions, I regressed Relationship Satisfaction on the mean-centered stigma variables and mean-centered Rejection Sensitivity in separate regressions. I then entered the interaction term (cross product of Rejection Sensitivity and stigma variables) into the equation in the second step to test the moderation models.

As Table 2 illustrates, none of the interaction terms entered in the second step increased the variance explained, indicating that Rejection Sensitivity did not moderate the relationship between stigma and Relationship Satisfaction.

Discussion

This study showed, as predicted, that people with HIV/AIDS who were sensitive to rejection experienced decreased relationship satisfaction. Also as predicted, HIV/AIDS stigma, specifically enacted stigma and concern with public attitudes, was positively related to rejection sensitivity. However, the mediation analyses indicated that the effect of stigma on relationship satisfaction was independent of the effect of rejection sensitivity on relationship satisfaction. In other words, the effect of stigma on relationship satisfaction was not attributable to the increased rejection sensitivity characteristic of participants who experienced relatively high levels of enacted stigma and concern with public attitudes. Thus, relationship dissatisfaction appears to flow from two different channels - HIV/AIDS stigma and a dispositional sensitivity to rejection.

The direct influence of enacted stigma and concern with public attitudes on relationship satisfaction suggests that stigma can damage a romantic relationship even if an individual is not sensitive to rejection. HIV/AIDS stigma is a major life stressor that can negatively impact the mental and physical health of people living with the disease (Crandall & Coleman, 1992; Herek, 1999). The current study provides evidence that stigma is related to another important aspect of well-being, satisfaction in romantic relationships.

Prior work with HIV-negative couples has shown that external stress predicts decreased romantic relationship quality (Tesser & Beach, 1998). The unrelenting nature of HIV/AIDS stigma could overwhelm the coping resources of individuals living with HIV/AIDS and spillover into their romantic relationships. Spillover occurs when stressors outside of the relationship (e.g., financial or workplace stress) lead to detrimental changes in individuals' thoughts and behavior within the relationship (Neff & Karney, 2004). It is easy to see how anticipating (i.e., concern with public attitudes) and experiencing (i.e., enacted) HIV/AIDS stigma could lead to negative outcomes within the relationship. The added stress resulting from external stigma could lead to increased arguments, negative appraisals of one's romantic partner, and withdrawn behavior (Neff & Karney, 2004). These negative outcomes not only decrease satisfaction, they also increase the risk of relationship dissolution.

Stigma is a highly stressful occurrence, therefore the association between stigma and relationship dissatisfaction may be particularly pronounced for individuals who rely on ineffective coping strategies or have inadequate social support. Future work should examine social support and coping as potential mediators in the relationship between stigma and relationship functioning.

This study also replicated the association between rejection sensitivity and relationship satisfaction. This link has been well established in prior work done on college samples showing the relationship detriments associated with sensitivity to rejection (Downey & Feldman, 1996; Downey et al., 1998). Downey and colleagues (1996) demonstrated that sensitivity to rejection often results in a self-fulfilling prophecy,

whereby the sensitive individuals elicit rejection in their relationships. Rejection sensitive individuals have been shown to react negatively to their romantic partners following potential cues of rejection, resulting in decreased relationship satisfaction for both partners, verbal and physical fighting, and breakup (Downey et al., 1998).

As hypothesized, rejection sensitivity had a positive relationship with almost all of the stigma variables: enacted stigma, concern with public attitudes, negative self-image, and individual layered stigma. These results show a consistent relationship between rejection sensitivity and stigma. This association is in line with prior work conceptualizing stigmatization as interpersonal rejection (Goffman, 1963; Kurzban & Leary, 2001; Miller & Kaiser, 2001) and studies showing that frequent interpersonal rejection is associated with higher levels of rejection sensitivity (Downey et al., 1998; Downey et al., 1999; Feldman & Downey, 1994). For example, Mendoza-Denton and colleagues (2002) demonstrated that recurrent exposure to interpersonal rejection as a result of one's stigmatized status has been shown to heighten sensitivity to rejection. Similarly, perceived stigma (due to poverty and domestic abuse) has been linked with an increased fear of rejection (Williams & Mickelson, 2008). These results suggest that people living with HIV/AIDS experience stigma as a rejecting experience, leading to a heightened sensitivity to rejection.

Although rejection sensitivity was associated with relationship satisfaction as expected, and although stigma was consistently related to rejection sensitivity, rejection sensitivity did not account for the association of stigma (enacted and concern with public attitudes) with relationship dissatisfaction. That is rejection sensitivity did not mediate

the relationship between stigma and relationship satisfaction. This study also showed that the relationship of stigma to relationship satisfaction was not stronger for people high in rejection sensitivity than for those who were low in rejection sensitivity. In other words, level of rejection sensitivity did not moderate the relationship between stigma and relationship satisfaction for any of the stigmas assessed in this study. The lack of both mediation and moderation indicates that rejection sensitivity and stigma both predict decreased relationship satisfaction independent of one another. These results suggest that an individual living with HIV/AIDS may have decreased relationship satisfaction resulting from either stigma or rejection sensitivity or both channels.

An alternative explanation for why rejection sensitivity did not mediate the relationship between stigma and relationship satisfaction is that the increases in rejection sensitivity that are associated with HIV/AIDS stigmatization deters individuals from pursuing romantic relationships. Prior work with college-age participants has shown that rejection sensitive individuals do seek out romantic relationships (Downey & Feldman, 1996), Normatively, college-age individuals are focused on establishing romantic and sexual relationships during this developmental stage (Erikson, 1950), therefore younger individuals may have a strong motivation to seek romantic partners, despite their fear of rejection. Older individuals may be less motivated to establish a romantic relationship and previous experiences with failed relationships (characteristic of people high in rejection sensitivity) may also hinder relationship seeking. In addition, individuals with a sensitivity to rejection may not feel comfortable disclosing their HIV/AIDS status to romantic partners and as a result, distance themselves from potential partners. Once data

are collected from enough participants (expected $N = 200$) to have sufficient power to test this hypothesis, I plan to follow-up the current study by examining whether rejection sensitivity is related to whether participants report being in a relationship. This follow-up will utilize data from the current sample as well as individuals who participated in the larger study that were not currently involved in a romantic relationship.

I had hypothesized that all of the stigma measures would be related to relationship satisfaction and that these associations would be particularly strong for enacted stigma and disclosure concerns. Out of the six measures of stigma assessed in the study, only enacted stigma and concern with public attitudes were related to relationship satisfaction. Enacted stigma refers to the amount of stigma individuals experience personally as a result of their HIV/AIDS status and concern with public attitudes refers to the amount an individual worries about general attitudes and reactions toward persons with HIV/AIDS. Mohr and Fassinger (2006) examined anticipation and anxiety regarding personally experiencing stigma, a measure comparable to enacted stigma. They found that this measure predicted decreased relationship satisfaction in same-sex couples. Lehmiller and Agnew (2006) found that perceived marginalization within one's social network (similar to enacted stigma) predicted decreased relationship commitment and an increase in relationship dissolution. In contrast with the current study, societal marginalization (similar to concern with public attitudes in the current study) did not predict relationship outcomes. The results from prior work and the current investigation show that enacted stigma and similar measures of personalized stigma consistently relate to decreased relationship satisfaction. As previously mentioned, external stress, including stigma from

others may decrease relationship satisfaction more than internal stress relating to stigma. By measuring how much stigma an individual feels they experience as a result of other people, enacted stigma taps into this external pressure. The inconsistency regarding concern with public attitudes indicates that further investigation is needed to determine under what circumstances societal stigmatization influences relationships.

Why did disclosure concerns and negative self-image fail to relate to relationship satisfaction? One possible explanation is that these components of stigma arise from the individual's personal vulnerabilities to stigma, whereas enacted stigma and concern with public attitudes are more likely to reflect the overt behavior of other people. External stress, originating from others outside of the relationship, may be more likely to harm the relationship than stress coming from within, which is potentially easier to control. Future work is needed to better understand the distinct ways in which different types of stigma relate to relationship satisfaction.

In contrast to the current study, qualitative research on the romantic relationships of people living with HIV/AIDS consistently finds that concerns about disclosure and negative self-image related to the disease hinder romantic functioning (Harvey & Wenzel, 2002; Jarman et al., 2005; Palmer & Bor, 2001). An important difference between the participants in the current study and the participants in prior qualitative research is that participants in the qualitative studies tended to be younger, newly diagnosed with HIV, and involved in relationships of relatively short durations (Greene et al., 2002; Halkitis et al., 2004; Holt et al., 1998; Jarmen et al., 2005; Palmer & Bor, 2001; Remien et al., 1995; Siegel et al., 2005; VanDevanter et al., 1999). For example, in

Palmer and Bor's (2001) sample, the mean age was 34 years old, the average time since diagnosis was approximately 3 years, and the average relationship length was approximately 4 years. Conversely, participants in the current study were older (on average 46.58 years old), have lived with HIV/AIDS a long time, and were involved in stable, long-term relationships (M = 9.28 years).

Research suggests that disclosure is more salient and problematic for those who are newly diagnosed or entering into a new romantic or sexual relationship (Palmer & Bor, 2001). The participants in the current study were typically involved in stable relationships, which should be less influenced by disclosure concerns than the newly established pairings examined in the qualitative literature. An individual who is newly diagnosed with HIV/AIDS may be more likely to internalize stigma, resulting in a negative self-image, which diminishes relationship quality (Lee, Kochman, & Sikkema, 2002).

Similarly, individuals living with the disease for many years also may be resistant to internalization of stigma and have a better self-image regarding the disease as a result. This could weaken the association between stigma relating to negative self-image and relationship dissatisfaction for older participants. In line with this hypothesis, age had a negative correlation with both negative self-image (r = -.39) and disclosure concerns (r = -.39). Furthermore, age did not have a significant relationship with enacted stigma (r = -.25) or concern with public attitudes (r = -.29).

The current study examined how stigmatization can hinder romantic relationships, but it is also important to investigate how romantic relationships can influence the

experience of stigma. Future research should examine the possibility that some romantic relationships function as a "safe haven", buffering people living with HIV/AIDS from the deleterious effects of stigma. Attachment theorists have proposed that adult romantic relationships can serve secure base and safe haven functions, similar to parent-infant relationships (Collins & Feeney, 2000; Hazan & Shaver, 1987; Shaver & Hazan, 1988). Although this safe haven function has not been examined with people living with HIV/AIDS, there is evidence for a general, buffering effect of romantic dyads. Specifically, romantic relationships have been linked with fewer symptoms of distress and better coping for people living with HIV/AIDS (Kalichman, 1998) as well as a decreased suicidal ideation (Carrico et al., 2007). It is likely that commitment to and investment in the relationship will increase if a romantic partner is the sole provider of an individual's emotional and instrumental support. Additionally, people living with HIV/AIDS may only disclose their seropositive status to their romantic partner (Haas, 2002; Kalichman, 2000), thereby increasing emotional closeness and intimacy for both partners (Holt et al., 1998; Marks et al., 1992). A relationship is most likely to function as a safe haven for individuals with a secure attachment style and a long-term, committed partner. Similarly, attachment researchers (Waters & Cummings, 2000) have theorized that only securely attached individuals are able to effectively utilize their romantic relationships as a safe haven and secure base.

The current study is a much-needed first step in understanding the role of stigmatization on relationship satisfaction. The findings and limitations of the current investigation can help guide the next stage of investigation by pointing out important

areas of focus. Although the results from this study shed light on the association between stigma and romantic relationship dissatisfaction, I only examined one relationship outcome (satisfaction). Focusing on one relationship construct is a limitation to the current investigation. I chose to focus on general level of relationship satisfaction because it was broad enough to apply to various types of relationships (e.g., dating and married participants) and has been linked to relationship health and dissolution (Hendrick, 1988). Future work should include a variety of relationship measures to better understand the romantic relationships of people living with HIV/AIDS. Specifically, important factors to examine in future studies include disclosure to romantic partners, commitment level, trust, physical/psychological intimacy and love (Haas, 2002; Kalichman, 2000; Lehmiller & Agnew, 2007; Palmer & Bor, 2001). Based on the existing literature, I think investigating these relationship constructs is the next step in understanding how living with HIV/AIDS influences romantic functioning.

Another limitation to the current investigation is the examination of only one member of the romantic dyad. Relationship research highlights the value of including both members of a dyad to better understand the influence of individual characteristics on the relationship as a whole (Reis, Collins & Berscheid, 2000; Talley & Bettencourt, 2010). Assessing both members of a romantic dyad is even more essential when studying people living with HIV/AIDS because of the particular relationship challenges they face that are related to the disease (e.g., transmission risks and disclosure concern). There is a lack of research on the romantic relationships of people living with HIV/AIDS. To better describe and explain these relationships, future work should investigate how disease stage

and serostatus matching influences romantic outcomes (e.g., what happens when both partners are HIV-positive versus only one?) (Talley & Bettencourt, 2010).

Context is another important factor to consider because romantic relationships do not occur in a social vacuum. It is important for future work to address contextual factors that may also influence romantic relationship outcomes. In particular, examining how much social support an individual has from within and outside of their romantic dyad could shed additional light on the differences between satisfied and unsatisfied pairings. Being diagnosed and living with HIV/AIDS is associated with a variety of stressors, therefore quality and availability of social support could have large impacts on romantic relationship satisfaction (Kalichman, 2000). For example, if an individual only discloses his or her status to their romantic partner, this limits the psychological and instrumental support they can receive for their HIV/AIDS and may overburden their romantic relationship. Song and Ingram (2002) demonstrated that satisfaction with social support in a sample of HIV-positive individuals predicted decreased mood disturbance and unsupportive responses predicted increased mood disturbance. Amount of life stressors and availability of social support may moderate the relationship between stigma and relationship dissatisfaction, such that only individuals with low levels of support or excessive life stress experience relationship deficits as a result of HIV/AIDS stigmatization. Psychological resiliency is another important individual difference to consider when looking for variables that may potentially interact with stigma and relationship satisfaction.

In the current study, layered stigma did not relate to relationship satisfaction. Future work is needed to further examine the influence of multiple stigmatizing characteristics on relationship satisfaction. Another important topic to consider is whether people living with HIV/AIDS have similar relationship experiences as a result of stigma when compared with individuals who have other stigmatizing conditions that are not directly linked with sexual activity and physical intimacy.

The findings from the current study have implications for interventions aimed at troubled relationships for people living with HIV/AIDS. Clinicians should seek to help their clients deal with both their sensitivity to rejection and the amount of stigma they face as a result of their HIV status. An intervention that focuses solely on either sensitivity to rejection or stigmatization is not suggested since both factors independently predicted relationship dissatisfaction in the current study. Enacted stigma and concern with public attitudes predicted decreased relationship satisfaction, suggesting that interventions may want to focus on these types of stigma experiences. Additional research is needed to make recommendations for specific interventions aimed at enhancing the relationships of people living with HIV/AIDS.

This study sheds light on the previously ignored topic of romantic relationships of people living with HIV/AIDS and the findings can help guide future endeavors. Drawing on qualitative interviews with people living with HIV/AIDS and studies of marginalized relationships, I hypothesized rejection sensitivity as a process through which stigma influences relationship satisfaction. A diverse sample of HIV-positive participants was recruited from Vermont and neighboring states to assess my proposed model. Contrary

to my expectations, rejection sensitivity did not mediate the relationship between HIV stigmatization and relationship satisfaction and no evidence for moderation was found. These results provide valuable information on the relationships among HIV/AIDS stigma, rejection sensitivity and relationship satisfaction. The finding that stigma directly influences relationship satisfaction suggests that stigma is powerful, detrimental force in the romantic relationships of people living with HIV/AIDS. Additional research is needed to fully understand why enacted stigma and concern with public attitudes predicts relationship dissatisfaction but layered stigma, disclosure concerns, and negative self-image do not. The results show that rejection sensitive individuals reported being less happy with their current relationship (in line with previous research utilizing college-age samples), regardless of stigma. Most of the measures of stigma related to rejection sensitivity, suggesting that experiencing various types of HIV/AIDS stigma heightens sensitivity to interpersonal rejection. In sum, the current study demonstrates that HIV/AIDS stigma hinders romantic relationship satisfaction irrespective of levels of rejection sensitivity.

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Table 1

Summary of Intercorrelations, Means and Standard Deviations

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*
HIV Stigma Scale Subscales								
1. Enacted	—							
2. Negative Self-Image	.62*	—						
3. Disclosure Concerns	.49*	.56*	—					
4. Concern with Public Attitudes	.74*	.55*	.70*	—				
Layered Stigma								
5. Individual	.42*	.24	.41*	.43*	—			
6. Group	.25	-.01	.20	.26	.74*	—		
7. Rejection Sensitivity	.53*	.40*	.22	.36*	.39*	.07	—	
8. Relationship Satisfaction	-.43*	-.18	-.19	-.39*	-.26	-.22	-.39*	—
M	32.55	19.55	29.37	18.97	13.26	15.66	7.44	25.34
SD	9.11	6.70	7.29	3.72	4.11	3.54	2.93	6.22

Note. For all scales, higher scores represent high levels of the construct.

* $p < .05$.

Table 2

Summaries of Six Hierarchical Regressions (One for Each Stigma Measure) Predicting Relationship Satisfaction from Stigma and Rejection Sensitivity

Predictor	*B*	*SE B*	β	ΔR^2
Step 1 Stigma/Rejection Sensitivity on Relationship Satisfaction				
Regression 1 Enacted	-.21	.12	-.31	.22
Regression 1 Rejection Sensitivity	-.49	.37	-.23	.22
Regression 2 Negative Self-Image	-.03	.16	-.03	.15
Regression 2 Rejection Sensitivity	-.81*	.36	-.38	.15
Regression 3 Disclosure Concerns	-.09	.14	-.10	.16
Regression 3 Rejection Sensitivity	-.78*	.34	-.37	.16
Regression 4 Concern with Public Attitudes	-.48	.27	-.29	.23
Regression 4 Rejection Sensitivity	-.61	.34	-.29	.23
Regression 5 Layered Individual	-.18	.25	-.12	.17
Regression 5 Rejection Sensitivity	-.73*	.36	-.34	.17
Regression 6 Layered Group	-.34	.27	-.19	.19
Regression 6 Rejection Sensitivity	-.80*	.32	-.38	.19
Step 2 Stigma x Rejection Sensitivity Interaction				
Regression 1	.01	.04	.05	.00
Regression 2	-.12	.07	-.03	.00
Regression 3	-.01	.04	-.04	.00
Regression 4	-.01	.09	-.02	.00
Regression 5	.16	.09	.40	.08
Regression 6	.05	.11	.07	.01

Note. In each regression summarized above, Relationship Satisfaction was regressed on one of the six stigma measures, Rejection Sensitivity, and their interaction.
* $p < .05$.

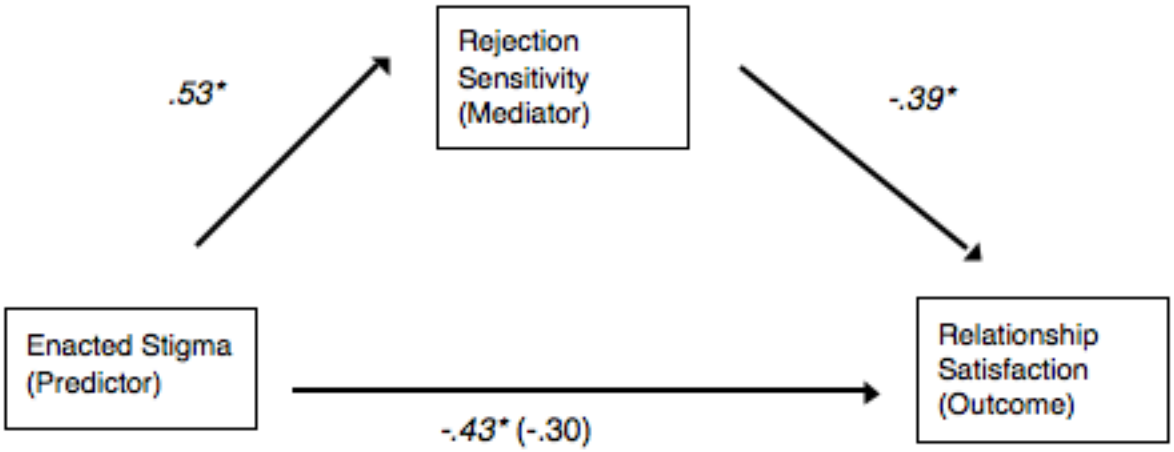

Figure 1. Mediation Model for the Relationship between Enacted Stigma and Relationship Satisfaction
*$p < .05$

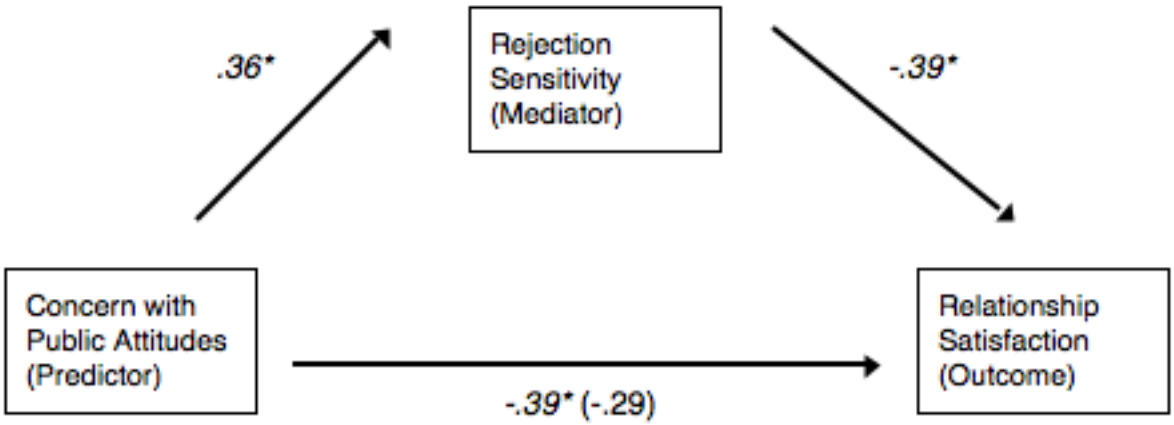

Figure 2. Mediation Model for the Relationship between Concern with Public Attitudes and Relationship Satisfaction
*$p < .05$

Appendix A

HIV Stigma Scale (Bunn et al., 2007)

1- Strongly Disagree, 2-Disagree, 3- Neither Disagree nor Agree, 4-Agree, 5-Strongly Agree

1. I feel guilty because I have HIV/AIDS.
2. People's attitudes about HIV/AIDS make me feel worse about myself.
3. Telling someone I have HIV/AIDS is risky.
4. Most people with HIV/AIDS lose their jobs when employers learn that they have HIV/AIDS.
5. I work hard to keep my HIV/AIDS a secret.
6. I feel I'm not as good as others because I have HIV/AIDS.
7. I never feel ashamed of having HIV/AIDS.
8. People with HIV/AIDS are treated like outcasts.
9. Most people believe a person who has HIV/AIDS is dirty.
10. Having HIV/AIDS makes me feel unclean.
11. Most people think that a person with HIV/AIDS is disgusting.
12. Having HIV/AIDS makes me feel that I'm a bad person.
13. Most people with HIV/AIDS are rejected when others learn that they have HIV/AIDS.
14. I am very careful who I tell that I have HIV/AIDS.
15. Some people who know that I have HIV/AIDS have grown more distant.
16. Most people are uncomfortable around someone with HIV/AIDS.
17. I never felt that I have to hide the fact that I have HIV/AIDS.
18. I worry that people may judge me when they learn that I have HIV/AIDS.
19. Having HIV/AIDS is disgusting to me.
20. I am hurt by how people reacted to learning I have HIV/AIDS.
21. I worry people who know I have HIV/AIDS will tell others.
22. I regret having told some people that I have HIV/AIDS.
23. People avoid touching me if they know I have HIV/AIDS.
24. People I care about stopped calling me after learning that I have HIV/AIDS.
25. People don't want me around their children once they know that I have HIV/AIDS.
26. People have physically backed away from me because I have HIV/AIDS.
27. I have stopped socializing with some people due to their reactions.
28. I have lost friends by telling them that I have HIV/AIDS.
29. I told people close to me to keep my HIV/AIDS a secret.
30. People who know that I have HIV/AIDS ignore my good points.
31. People seem afraid of me because I have HIV/AIDS.
32. In many areas of my life, no one knows that I have HIV/AIDS.

Appendix B

Layered Stigma

Note: All statements followed by a 5 point scale

1- Strongly Disagree, 2-Disagree, 3- Neither Disagree nor Agree, 4-Agree, 5-Strongly Agree

1. In general, I experience discrimination because of my ethnicity/race.
2. In general, there is discrimination against people with my ethnicity/race.
3. In general, I experience discrimination because of my sexual orientation.
4. In general, there is discrimination against people with my sexual orientation.
5. In general, I experience discrimination because of my gender.
6. In general, there is discrimination against people of my gender.
7. In general, I experience discrimination because of my income level.
8. In general, there is discrimination against people with my income level.
9. In general, I experience discrimination because I have HIV/AIDS.
10. In general, there is discrimination against people with HIV/AIDS.
11. In general, I experience discrimination because of my religion.
12. In general, there is discrimination against people of my religion.

Appendix C

Adult-Rejection Sensitivity Questionnaire (Downey, 2008)

Instructions: The items below describe situations in which people sometimes ask things of others. For each item, imagine that you are in the situation, and then answer the questions that follow it.

Scale for question A: 1- Very unconcerned, 2, 3, 4, 5, 6- Very Concerned
Scale for question B: 1- Very unlikely, 2, 3, 4, 5, 6- Very likely

1. You ask your parents or another family member for a loan to help you through a difficult financial time.
   A: How concerned or anxious would you be over whether or not your family would want to help you?
   B: I would expect that they would agree to help as much as they can.

2. You approach a close friend to talk after doing or saying something that seriously upset him/her.
   A: How concerned or anxious would you be over whether or not your friend would want to talk to you?
   B: I would expect that he/she would want to talk with me to try to work things out.

3. You bring up the issue of sexual protection with your significant other and tell him/her how important you think it is.
   A: How concerned or anxious would you be over his/her reaction?
   B: I would expect that he/she would be willing to discuss our possible options without getting defensive.

4. You ask your supervisor for help with a problem you have been having at work.
   A: How concerned or anxious would you be over whether or not the person would want to help you?
   B: I would expect that he/she would want to try to help me out.

5. After a bitter argument, you call or approach your significant other because you want to make up.

A: How concerned or anxious would you be over whether or not your significant other would want to make up with you?

B: I would expect that he/she would be at least as eager to make up as I would be.

6. You ask your parents or other family members to come to an occasion important to you.

A: How concerned or anxious would you be over whether or not they would want to come?

B: I would expect that they would want to come.

7. At a party, you notice someone on the other side of the room that you'd like to get to know, and you approach him or her to try to start a conversation

A: How concerned or anxious would you be over whether or not the person would want to talk with you?

B: I would expect that he/she would want to talk with me.

8. Lately you've been noticing some distance between yourself and your significant other, and you ask him/her if there is something wrong

A: How concerned or anxious would you be over whether or not he/she still loves you and wants to be with you?

B: I would expect that he/she will show sincere love and commitment to relationship no matter what else may be going on.

9. You call a friend when there is something on your mind that you feel you really need to talk about.

A: How concerned or anxious would you be over whether or not your friend would want to listen?

B: I would expect that he/she would listen and support me.

Appendix D

Relationship Assessment Scale (Hendrick, 1988)

Instructions: For each of the following questions, please choose the number which best answers the question for you.

1. How well does your partner meet your needs?
   1- Poorly, 2, 3- Average, 4, 5- Extremely Well

2. In general, how satisfied are you with your relationship?
   1- Unsatisfied, 2, 3- Average, 4, 5- Extremely Satisfied

3. How good is your relationship compared to most?
   1- Poor, 2, 3- Average, 4, 5- Excellent

4. How often do you wish you hadn't gotten into this relationship?
   1- Never, 2, 3- Average, 4, 5- Very Often

5. To what extent has your relationship met your original expectations?
   1- Hardly at all, 2, 3- Average, 4, 5- Completely

6. How much do you love your partner?
   1- Not Much 2, 3- Average, 4, 5- Very Much

7. How many problems are there in your relationship?
   1- Very few, 2, 3- Average, 4, 5- Very many